

to the water they all floated as buoyantly as before. Although there was not the slightest appearance of putrefaction, (the birth had probably taken place eight or ten hours before the examination; the weather beside was cool for the season, the thermometer, at noon, in my office, being 72° F.,) and no probability that artificial inflation had been attempted, I placed one of the pieces in a strong linen cloth, and compressed it with all the force I was capable of exerting. On throwing this again into the water it did not appear in the slightest degree to have lost its buoyancy. The lungs appeared to be in every respect perfectly healthy—they crepitated when cut. The relative weight of body and lungs was 49.5, which is considerably greater than Ploucquets average estimate, and is also greater than that given by Dr. Beck. There was, however, a slight degree of inaccuracy in weighing both the body and lungs, which doubtless affected the result. The ductus arteriosus was not larger than one of the branches of the pulmonary artery. It was contracted in the *middle*, presenting somewhat of an hour-glass appearance.

As the jury had become exceedingly impatient at their detention, the dissection was not continued. The state of the ductus venosus, foramen ovale, and intestinal canal, however desirable it would have been to examine them, could not, I suppose, have thrown any additional light upon the subject, since it is well known that the changes from which an inference could be drawn, do not take place until some time after birth; and it is certain that this child, if born alive, had been permitted to live but a very short time. Had not enough been ascertained to justify the conclusion to which we come, that the child had not only been born alive, but that respiration had been perfectly established? The manner of its death was not so evident. If it had died from hemorrhage, would not the surface have been blanched and the blood-vessels empty? Writers on medical jurisprudence answer in the affirmative, and yet in this case the colour was not very different from natural, and the blood-vessels were full—certainly more than three ounces could have been collected from the cavity of the thorax alone. My own belief is, that the woman cut the funis and immediately afterward smothered her child in the clothes in which it was found enveloped, thus adding suffocation to hemorrhage, and so making “assurance doubly sure.” The appearance of the face strengthens this supposition. The verdict of the jury was that the child was born alive, and that its death was owing to neglect on the part of the mother. Here the matter rested—she was not tried for the offence.

Much might be said upon the subject of this indifference to the life of a child, did time and space permit. Since the above case occurred, I have seen an instance in which the child cried after the head was born, and detention was caused by the shoulders—the birth was completed in time to preserve the child. I have also been informed of a case, in which the child was suddenly expelled while the mother was standing on the floor. The funis was ruptured about four inches from the body—there was no hemorrhage, nor was the child at all injured by the fall.

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#### DOMESTIC SUMMARY.

*Angular Anchylosis of the Knee-Joint, treated by Dr. J. R. Barton's method.*—Dr. A. R. Kilpatrick reports in the *Western Journal of Med. and Surg.*, June 1844, a case of anchylosis successfully treated by Dr. PLATT BURR of Cheneyville, La., by Dr. Barton's method.

The subject of the case was a negro man 40 years of age, of stout frame, and good general health, who, while engaged, on the 12th December, 1840, in hewing a log, accidentally let the broad axe slip, and the corner of it struck the left knee with considerable force, on the inner side, and penetrated the side of the head of the tibia close to the patella. The wound was not more than an inch long, and soon healed up, although there was slight pain in the part. By exposure and active exercise, the knee was swollen rapidly to a very large size, and that, together with the pain, disabled him for work and forced him to take his bed.

The measures adopted for checking the inflammation were unsuccessful, and the whole limb became enormously enlarged, suppuration came on, and a great quantity of pus was discharged at three several openings, above and below the knee. The purulent discharge ceased, the limb was reduced in size, the muscles were flaccid, and the skin was loose, dry and crusty, so much so that when rubbed or thumped it emitted a sound like that of coarse brown paper or dry raw-hide. The knee still continued unnaturally large, and the skin on it was tight and glossy. As he suffered less pain when the leg was flexed, he was permitted to keep it in that position so long that it became fixed; the synovial fluid and membranes were destroyed, the femur, tibia and patella all united firmly together as if they were a continuation of one bone, and from the firm adhesion which had taken place, considerable force would have been required to disunite them. When he was seated, no one could perceive that any deformity existed; but on his assuming the erect position, his leg and foot projected backwards at a right angle with the other leg.

Dr. Burr being consulted, he advised an operation, and the patient consenting, Dr. B. operated on the 8th December, 1841, one year after the injury.

The patient was placed on a table with his legs hanging down over the end, his body and arms being held by assistants. "The first incision was made by commencing at a point opposite to the upper and anterior margin of the external condyle of the femur, and passing obliquely upwards across the front of the thigh, terminated on the inner side. The second incision commenced also on the outer side, about three inches above the first, and passing obliquely downwards across the front of the thigh, terminated at the point of the other incision, thereby forming an acute angle. The integuments, the extensor muscles, part of the vastus externus, and internus and the crureus were divided by these incisions. The triangular flap was then dissected up from the femur close to the condyles, and the soft parts on either side were pressed down out of the way, so as to admit of the free use of the saw. The only knife employed in all the operation was the common scalpel.

"The flap then being turned up and held out of the way, a common amputating saw was used, and by inclining it, a wedge-shaped piece of the femur was taken out, about two and a quarter inches at the base, and three lines at the apex. The femur was not completely divided by the saw, as was suggested by Dr. Barton, but about three lines were left undivided, which was fractured by forcibly drawing the leg back, and the spiculæ thereby formed answered the purpose admirably of keeping the extremities of the bone in their proper place; and, moreover, the danger of injuring the popliteal artery was thereby avoided.

"The time required for the operation was about five minutes. There were three small arteries divided which required ligatures; when they were secured the flap was returned to its place, secured by a few sutures, the ends of the ligatures were brought out and fixed, and adhesive strips and light compress and bandages completed the dressing.

"Before moving the patient from the table, the limb was placed at the same angle of flexion it was at before the operation, on a double-inclined plane similar to Amesbury's apparatus, with a movable cross piece to regulate and fix its angularity, and a foot piece with a shoe attached to it. The plane was rendered comfortable by long bags of carded cotton, suited to the shape of the parts and so adjusted as to prevent pressure or friction upon the popliteal region. The limb was kept in that angular position for some weeks, until it was thought the spiculæ and asperities of the bone were either absorbed or covered by depo-

site. The sutures and ligatures of the arteries were properly attended to and removed. Adhesion of the soft parts progressed rapidly and regularly to complete re-union with little pain or trouble.

"By means of the brace on the apparatus the limb was gradually straightened until brought very nearly straight, but agreeable to the suggestion of Dr. Barton, a very slight angularity was maintained intentionally, in order to prevent his heel, in walking, from striking against any obstacle or inequality which might be in the way. The double-inclined plane was then thrown aside, and the limb placed in the ordinary straight box used in common fractures, where it was kept for better than three months, at the expiration of which time he allowed to move about on a crutch, as the bones had knitted together pretty well."

In the month of June, 1842, he could walk about on his leg without the use of a staff, and went to work. But on the 15th of July, of the same year, in attempting to mount a ladder he missed his footing, and in the fall broke his leg again at the point of operation. As he had complained of his foot hurting in the instep, at the metatarsus and toes, especially when he walked much, and when standing on logs chopping, when it was reset the last time, it was placed in the straight box without any angularity, being quite straight. No bad results followed this fracture, and in less than two months he was able to be up and about again, and could walk very well without crutch or staff.

Dr. Kilpatrick says that he saw the patient on the 15th April, 1844, busily engaged in spading up the garden. He told Dr. K. that he could hoe and chop with as much ease as ever he did; and ploughing was not irksome to him.

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*Self-propelling Power of the Blood.*—Dr. HORACE GREEN made the following communication on this subject to the New York Medical and Surgical Society.

"Opposite opinions," remarked Dr. G., "are still entertained by physiologists on this subject. Treviranus, Oesterreicher, Wolff, and several other microscopists, declare, that 'the blood is endued with the power of self-propulsion,' which they suppose to be exerted in the capillaries, during life, independently of the heart's action, and to continue after the latter has ceased; while, on the other hand, Bæer, Wedemeyer, and, more recently, Müller, deny as positively the existence of a self-propelling power in the blood.

"Having been engaged of late in making some microscopic observations upon the blood and other animal fluids, this subject, said Dr. Green, among others, had engaged his attention; and he supposed it might not be uninteresting to the Society to hear the result of some experiments which have been directed to this point.

"Müller, who denies the existence of a power in the blood, independent of the heart's action, allows that there are two conditions under which the blood in the capillaries of a transparent part, separated from the body, may still be seen in motion by means of the microscope. One, where the blood continues to flow from divided vessels—the escape of the blood from the openings of these divided trunks imparting or causing a motion of the blood in the minute vessels toward the openings in the larger ones. The second condition under which motion is perceptible, is, when the direct rays of the sun are allowed to fall on a moist part separated from the body. The surface of the part thus becomes dry and wrinkled, and this constriction causes a rapid emptying of the capillary vessels, which, together with the effect of illumination by the direct rays of the sun, produces a flickering appearance; and in this way he imagines opposing observers have been deceived. Dr. G. has himself observed, in numerous instances, motion of the blood in capillary vessels, active and continued, independent of the heart's action, when the above condition of things could not have existed.

"By placing under the field of the microscope the most transparent part of the web of the foot of a very small frog, Dr. G. has observed many capillary vessels so minute as to be capable of admitting only a single fill of red globules. These globules may often be seen running different directions in parallel vessels; and, not unfrequently, single globules, and sometimes two or three together, may be observed, separated apparently at a considerable distance from any